

HIGH EXTINCTION RATIO FIBER INTERFEROMETER

ABSTRACT OF THE DISCLOSURE

A high extinction ratio interferometer is disclosed. The interferometer includes a first and second optical fiber each having a first end and a reflective end and an optical coupler for coupling the first optical fiber and the second optical fiber between their first ends and their reflective ends. The first optical fiber provides a first optical path from the optical coupler to its reflective end and back to the optical coupler and the second optical fiber provides a second optical path from the optical coupler to its reflective end and back to the optical coupler. The second path is greater than the first path by a delay length and the first path and the second path are each less than approximately 20 cm. The interferometer finds application as a differential phase shift keyed (DPSK) demodulator, particularly useful in a satellite system employing inter-satellite communication.

"Express Mail" mailing label number EV329955886 US
Date of Deposit SEPTEMBER 11, 2003
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
Suzie McCleane
(printed name)
Suzie
(signature)